Abstract

Radiometric Measuring Device

Provided is a radiometric measuring device for mounting at a container (3) fillable with a filling substance (1). The measuring device, which is cost-favorable both in installation and operation, includes: A radioactive source (5), which, during operation, sends radioactive radiation through the container (3); at least two detectors (D_i), which serve for registering radiation passing through the container (3) and for producing electrical pulse rates (N_i) corresponding to the registered radiation; wherein the detectors (D_i) are connected together and with a superordinated unit (23) by a single line running outside of the detectors (D_i). The pulse rates (N_i) and, in the form of offsets (O_i), status of the detectors (D_i) are transmitted on the single line.

(Fig. 1)

List of Reference Characters

1 filling substance
3 container
5 source of radiation
7 scintillator
9 photomultiplier
11 protective tube
13 electronics
15 counter
17 microcontroller
19 offset generator
20 output stage
21 collector line
23 superordinated unit
25 counter
27 evaluating unit
28 memory
29 measuring device electronics
31 evaluating unit
33 turn-off switch
35 turn-off switch
37 connecting line
39 first input
41 second input
43 third input
45 turn-off switch
47 output
49 light conductor